

# Double Insulated 7" Disc Grinder

## Instruction manual



MODEL 7400  
7" Disc Grinder

### IMPORTANT

Please make certain that the person who is to use this equipment carefully reads and understands these instructions before starting operations.

The Model and Serial No. plate is located on the main housing of the tool. Record these numbers in the spaces below and retain for future reference.

Model No. \_\_\_\_\_

Type \_\_\_\_\_

Serial No. \_\_\_\_\_

Part No. 881119-4910

**PORTER-CABLE**  
PROFESSIONAL POWER TOOLS

## IMPORTANT SAFETY INSTRUCTIONS

**WARNING:** When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the following:

### READ AND FOLLOW ALL INSTRUCTIONS.

There are certain applications for which this tool was designed. Porter-Cable strongly recommends that this tool NOT be modified and/or used for any application other than for which it was designed. If you have any questions relative to its application DO NOT use the tool until you have written Porter-Cable and we have advised you.

Product Manager  
Porter-Cable Corporation  
4825 Highway 45 North  
P. O. Box 2468  
Jackson, TN 38302-2468

**POLARIZED PLUGS:** To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

**1. KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.

**2. AVOID DANGEROUS ENVIRONMENT.** Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep area well lit. Avoid chemical or corrosive environment. Do not use tool in presence of flammable liquids or gases.

**3. GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.

**4. KEEP CHILDREN AWAY.** Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.

**5. STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place – out of reach of children.

**6. DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.

**7. USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy duty tool. Don't use tool for purpose not intended – for example – do not use a circular saw for cutting tree limbs or logs.

**8. DRESS PROPERLY.** Do not wear loose clothing or jewelry. Loose clothing, draw strings and jewelry can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.

**9. USE SAFETY GLASSES.** Wear safety glasses or goggles while operating power tools. Also face or dust mask if operation creates dust. All persons in the area where power tools are being operated should also wear safety glasses and face or dust mask.

**10. DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges. Have damaged or worn power cord and strain reliever replaced immediately. DO NOT ATTEMPT TO REPAIR POWER CORD.

- 11. SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
- 12. DON'T OVERREACH.** Keep proper footing and balance at all times.
- 13. MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Have all worn, broken or lost parts replaced immediately. Keep handles dry, clean and free from oil and grease.
- 14. DISCONNECT TOOLS** when not in use, before servicing, and when changing accessories such as blades, bits, cutters, etc.
- 15. REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
- 16. AVOID UNINTENTIONAL STARTING.** Do not carry a plugged-in tool with finger on switch. Be sure switch is off when plugging in. Keep hands, body and clothing clear of blades, bits, cutters, etc. when plugging in the tool.
- 17. OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords marked "Suitable for use with outdoor appliances – store indoors when not in use."
- 18. STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired or while under the influence of medication, alcohol or drugs.
- 19. CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.
- 20. WEAR EAR PROTECTION** to safeguard against possible hearing loss.

SAVE THESE INSTRUCTIONS

## REPLACEMENT PARTS

When servicing use only identical replacement parts.

## ADDITIONAL SAFETY RULES FOR DISC GRINDERS

- 1. NEVER** use the spindle lock pin to stop the spindle from rotating.
- 2. ALWAYS** use guards that meet ANSI Code B7-1 (American National Standard Institute, N.Y., N.Y.). Position the guard so that flying chips or pieces of a wheel that might accidentally break will be deflected away from the operator.
- 3. MAKE SURE** that grinding wheels, discs, etc., are in good condition, free of cracks or chips and that **RATED SPEED EXCEEDS THAT INDICATED ON THE TOOL SPECIFICATION PLATE.**

**4. USE PROPER SAFETY EQUIPMENT.** Wear safety goggles to protect your eyes and wear a protective mask to minimize breathing in the fine dust created while sanding. **NOTE:** Some wood contains preservatives which can be toxic. Take extra care to prevent inhalation and skin contact when working with these materials. Request, and follow, any safety information available from your material supplier.

**5. POSITION GRINDING WHEEL** to contact work at approximately a 30° angle so that wheel will be worn from the outside.

**6. WEAR EYE AND FACE PROTECTION.** Injury to face and eyes can result if sanding disc flies off, or if sanding pad or grinding disc ruptures. When involved in, or near sanding or grinding operations: wear impact resistant glasses and full face shield as specified in ANSI standard Z87.1.

**7. SANDING OF LEAD BASED-PAINT IS NOT RECOMMENDED.** Lead-based paint should only be removed by a professional.

## **ADDITIONAL SAFETY RULES FOR PAINT REMOVAL**

**WARNING:** Extreme care should be taken when removing paint. The peelings, residue, and vapors of paint may contain lead, which is poisonous. Exposure to even low levels of lead can cause irreversible brain and nervous system damage; young and unborn children are particularly vulnerable.

Before beginning any paint removal process you should determine whether the paint you are removing contains lead. This can be done by your local health department or by a professional who uses a paint analyzer to check for lead.

**LEAD-BASED PAINT SHOULD ONLY BE REMOVED BY A PROFESSIONAL.**

Persons removing paint should follow these guidelines:

**1. KEEP THE WORK AREA WELL VENTILATED.** Open the windows and put an exhaust fan in one of them. Be sure the fan is moving air from inside to outside.

**2. REMOVE OR COVER** any carpets, rugs, furniture, clothing, cooking utensils and air ducts.

**3. PLACE DROP CLOTHS** in the work area to catch any paint chips or peelings. Wear protective clothing such as extra work shirts, overalls and hats.

**4. WORK IN ONE ROOM AT A TIME.** Furnishings should be removed or placed in the center of the room and covered. Work areas should be sealed off from the rest of the dwelling by sealing doorways with drop cloths.

**5. CHILDREN, PREGNANT OR POTENTIALLY PREGNANT** women and nursing mothers should not be present in the work area until the work is done and all cleanup is complete.

**6. WEAR A DUST RESPIRATOR** or a dual filter (dust and fume) respirator mask which has been approved by the Occupational Safety and Health Administration (OSHA), the National Institute of Safety and Health (NIOSH), or the United States Bureau of Mines. These masks and replaceable filters are readily available at major hardware stores. Be sure the mask fits. Beards and facial hair may keep the masks from sealing properly. Change filters often. **DISPOSABLE PAPER MASKS ARE NOT ADEQUATE.**



**7. KEEP FOOD AND DRINK** out of the work area. Wash hands, arms, and face and rinse mouth before eating or drinking. Do not smoke or chew gum or tobacco in the work area.

**8. CLEAN UP ALL REMOVED PAINT** and dust by wet mopping the floors. Use a wet cloth to clean all walls, sills and any other surfaces where paint or dust is clinging. **DO NOT SWEEP, DRY DUST OR VACUUM.** Use a high phosphate detergent or trisodium (TSP) to wash and mop areas.

**9. AT THE END OF EACH WORK SESSION** put the paint chips and debris in a double plastic bag, close it with tape or twist ties and dispose of properly.

**10. REMOVE PROTECTIVE CLOTHING** and work shoes in the work area to avoid carrying dust into the rest of the dwelling. Wash work clothes separately. Wipe shoes off with a wet rag that is then washed with the work clothes. Wash hair and body thoroughly with soap and water.

## MOTOR

Many Porter-Cable tools will operate on either D.C., or single phase 25 to 60 cycle A.C. current and voltage within plus or minus 5 percent of that shown on the specification plate on the tool. Several models, however, are designed for A.C. current only. Refer to the specification plate on your tool for proper voltage and current rating.

**CAUTION:** Do not operate your tool on a current on which the voltage is not within correct limits. Do not operate tools rated A.C. only on D.C. current. To do so may seriously damage the tool.

## EXTENSION CORD SELECTION

If an extension cord is used, make sure the conductor size is large enough to prevent excessive voltage drop which will cause loss of power and possible motor damage. A table of recommended extension cord sizes will be found below. This table is based on limiting line voltage drop to 5 volts (10 volts for 230 volts) at 150% of rated amperes.

If an extension cord is to be used outdoors it must be marked with the suffix W-A following the cord type designation. For example – SJTW-A to indicate it is acceptable for outdoor use.

RECOMMENDED EXTENSION CORD SIZES FOR USE WITH PORTABLE ELECTRIC TOOLS

		Length of Cord in Feet									
		115V	25 Ft.	50 Ft.	100 Ft.	150 Ft.	200 Ft.	250 Ft.	300 Ft.	400 Ft.	500 Ft.
		230V	50 Ft.	100 Ft.	200 Ft.	300 Ft.	400 Ft.	500 Ft.	600 Ft.	800 Ft.	1000 Ft.
Nameplate Ampere Rating	0-2	18	18	18	16	16	14	14	12	12	12
	2-3	18	18	16	14	14	12	12	10	10	10
	3-4	18	18	16	14	12	12	10	10	8	8
	4-5	18	18	14	12	12	10	10	8	8	8
	5-6	18	16	14	12	10	10	8	8	6	6
	6-8	18	16	12	10	10	8	6	6	6	6
	8-10	18	14	12	10	8	8	6	6	4	4
	10-12	16	14	10	8	8	6	6	4	4	4
	12-14	16	12	10	8	6	6	6	4	4	2
	14-16	16	12	10	8	6	6	4	4	2	2
	16-18	14	12	8	8	6	4	4	2	2	2
	18-20	14	12	8	6	6	4	4	2	2	2

NOTE: Wire sizes shown are AWG (American Wire Gauge)

## AUXILIARY HANDLE

An Auxiliary Handle is supplied with this tool and can be mounted on either side of the gear housing. This handle should be used to give complete control of the machine. Assemble handle to machine as follows:

1. **CAUTION: DISCONNECT TOOL FROM POWER SOURCE.**
2. Slide hex spacer (See Fig. 1 ) onto bolt.
3. Place collar onto bolt and hex spacer assembly and position to either the right or left handle boss.

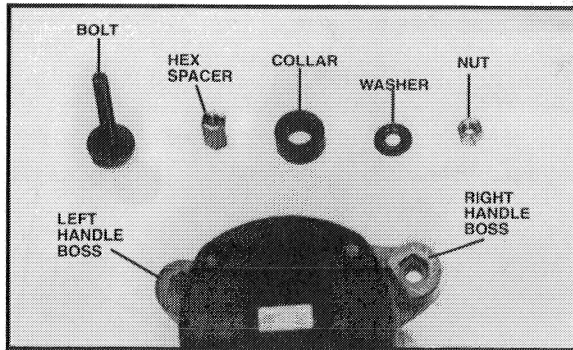


Fig. 1

4. Align and seat hex spacer into the hex socket of the handle boss.
5. Place flat washer onto bolt and secure with hex nut. Tighten securely. (See Fig. 2)

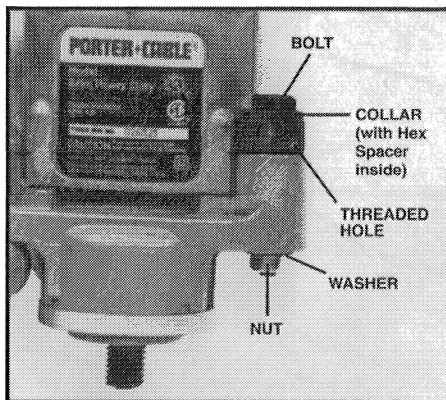


Fig. 2

6. Thread auxiliary handle into collar. The handle and collar may be tightened in any one of four positions (See Fig. 3). Move handle and collar to approximate desired position and tighten securely.

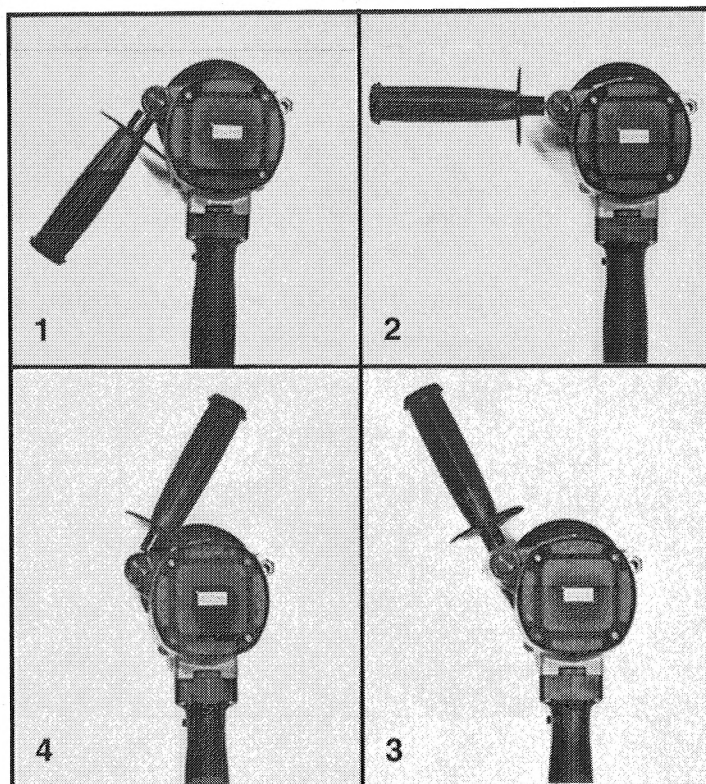


Fig. 3

## SWITCH

A trigger switch (See Fig. 4), with lock button is conveniently located in the machine handle. To start machine, depress switch trigger. To stop machine, release trigger. If it is desired to keep machine running without holding finger on trigger, depress trigger, push in on switch locking button in left side of handle, and while holding button in, release trigger. To release locking button, depress trigger and release.

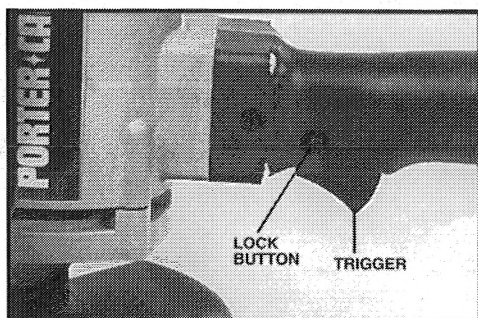


Fig. 4

**CAUTION:** ALWAYS MAKE SURE SWITCH IS IN THE "OFF" POSITION BEFORE CONNECTING MACHINE TO THE POWER CIRCUIT.

## SPINDLE LOCK

A spindle lock is located on the right side of the gear case (See Fig. 5). To Operate: Depress spindle lock pin with thumb while rotating spindle BY HAND until pin engages and stops spindle rotation.

**CAUTION:** Do not depress spindle lock while tool is running.

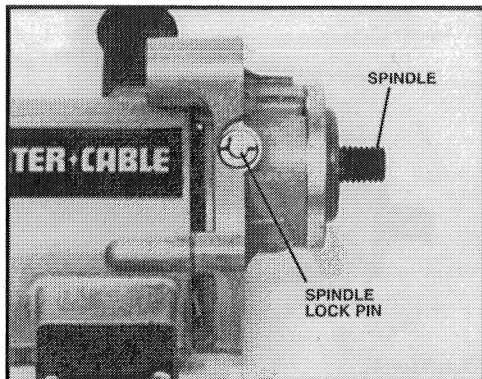


Fig. 5

## INSTALL SAFETY GUARD

1. **CAUTION:** DISCONNECT TOOL FROM POWER SOURCE.
2. Loosen guard clamp bolt.
3. Slide guard clamp ring onto gear housing (see Fig. 6) until clamp ring seats against gear housing bosses (see Fig. 7).

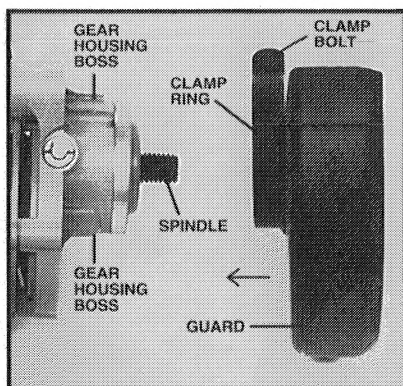


Fig. 6

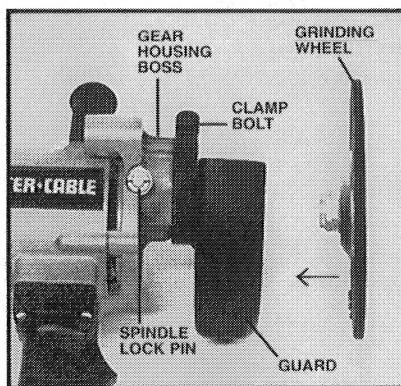


Fig. 7

4. Position guard so that flying objects or pieces of wheel that might accidentally break will be deflected away from the operator.

5. Hold guard clamp ring against gear housing bosses while firmly tightening clamp bolt.

## **INSTALL GRINDING WHEEL**

**WARNING:** Install safety guard that meets ANSI Code B7-1 before installing grinding wheel. Unguarded grinding wheels are hazardous.

1. **CAUTION:** DISCONNECT TOOL FROM POWER SOURCE.

2. Depress spindle lock pin (see Fig. 7) and hold while rotating grinding wheel clockwise onto spindle (see Fig. 6); tighten wheel firmly with a 1" open-end wrench.

## **USING A DISC GRINDER**

Be certain wheel guard is securely installed and positioned properly (see INSTALL SAFETY GUARD).

Firmly grip the switch handle with one hand and the auxiliary handle with the other hand. (Always lift grinder off work before starting or stopping motor). Start motor. Position grinder so that outer edge of wheel contacts work at approximately a 30° angle. Move grinder back and forth over the area to be smoothed while applying light pressure.

## **MAINTENANCE**

### **KEEP TOOL CLEAN**

Periodically blow out all air passages with compressed air. Remove buildup of grime resulting from working with green or sappy woods. All plastic parts should be cleaned with soft cloths. **NOTE:** Never use solvents to clean plastic parts. Plastics can be easily damaged by such solvents.

**CAUTION:** Wear safety glasses while using compressed air.

### **FAILURE TO START**

Should your tool fail to start, check to make sure the prongs on the cord plug are making good contact in the outlet. Also, check for blown fuses or open circuit breakers in the line.

### **BRUSH INSPECTION AND LUBRICATION**

At approximately 100 hours of use, take or send your tool to your nearest Authorized Porter-Cable Service Station to be thoroughly cleaned and inspected; worn parts replaced, when necessary; relubricated with fresh lubricant, if required; reassembled with new brushes; and performance tested.



Any loss of power before the above maintenance check may indicate the need for immediate servicing of your tool. **DO NOT CONTINUE TO OPERATE TOOL UNDER THIS CONDITION.** If proper operating voltage is present, return your tool to the Service Station for immediate service.

## **SERVICE AND REPAIRS**

All quality tools will eventually require servicing or replacement of parts due to wear from normal use. These operations, including brush inspection and replacement, should **ONLY** be performed by either an **AUTHORIZED PORTER-CABLE SERVICE STATION** or a **PORTER-CABLE SERVICE CENTER**. All repairs made by these agencies are fully guaranteed against defective material and workmanship. We cannot guarantee repairs made or attempted by anyone other than these agencies.

Should you have any questions about your tool, feel free to write us at any time. In any communications, please give all information shown on the nameplate of your tool (model number, type, serial number, etc.).

## **ACCESSORIES**

The testing of this tool has been accomplished with the use of the following accessories **ONLY**. For safest operation, it is recommended that **ONLY** these accessories be used with this product.

**WARNING:** Since accessories other than those listed have not been tested with this product, use of such accessories could be hazardous.

**874951** 7" × ¼" Grinding Wheel

**875038** 7" Wheel Guard

## **PORTER-CABLE LIMITED ONE YEAR WARRANTY**

Porter-Cable warrants its Professional Power Tools for a period of one year from the date of original purchase. We will repair or replace at our option, any part or parts of the product and accessories covered under this warranty which, after examination, proves to be defective in workmanship or material during the warranty period. For repair or replacement return the complete tool or accessory, transportation prepaid, to your nearest Porter-Cable Service Center or Authorized Service Station as listed under "TOOLS-ELECTRIC" in the Yellow Pages of your telephone directory. Proof of purchase may be required. This warranty does not apply to repair or replacement required due to misuse, abuse, normal wear and tear or repairs attempted or made by other than our Service Centers or Authorized Service Stations.

ANY IMPLIED WARRANTY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WILL LAST ONLY FOR ONE (1) YEAR FROM THE DATE OF PURCHASE.

To obtain information on warranty performance please write to: PORTER-CABLE CORPORATION, 4825 Highway 45 North, P.O. Box 2468, Jackson, Tennessee 38302-2468; Attention: Product Service. THE FOREGOING OBLIGATION IS PORTER-CABLE'S SOLE LIABILITY UNDER THIS OR ANY IMPLIED WARRANTY AND UNDER NO CIRCUMSTANCES SHALL PORTER-CABLE BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

## PORTER-CABLE SERVICE CENTERS

Parts and Repair Service for Porter-Cable Power Tools are Available at These Locations

### CALIFORNIA

City of Industry 91745 (Los Angeles)  
1305 John Reed Court  
Phone: (818) 333-3566  
Fax: (818) 330-5900

San Leandro 94577 (Oakland)  
3039 Teagarden Street  
Phone: (510) 357-9762  
Fax: (510) 357-7939

### COLORADO

Denver 80204  
2561 West 8th Avenue  
Phone: (303) 892-6113  
Fax: (303) 595-0358

### FLORIDA

Hialeah 33014 (Miami)  
16373-75 NW 57th Ave.  
Phone: (305) 624-2523  
Fax: (305) 628-2654

Tampa 33609  
4538 W. Kennedy Boulevard  
Phone: (813) 877-9585  
Fax: (813) 289-7948

### GEORGIA

Morrow 30260 (Atlanta)  
1286 Citizens Parkway  
Suite C  
Phone: (404) 961-0900  
Fax: (404) 961-8624

### ILLINOIS

Addison 60101 (Chicago)  
311 Laura Drive  
Phone: (708) 628-6100  
Fax: (708) 628-0023

### MARYLAND

Baltimore 21227  
7397 Washington Blvd.  
Suite #102  
Phone: (410) 799-9394  
Fax: (410) 799-9398

### MASSACHUSETTS

Franklin 02038 (Boston)  
Franklin Industrial Park  
101E Constitution Blvd.  
Phone: (508) 520-8802  
Fax: (508) 528-8089

### MICHIGAN

Troy 48063 (Detroit)  
1355 Combermere  
Phone: (810) 597-5000  
Fax: (810) 597-5004

### MINNESOTA

Minneapolis 55429  
4315 68th Avenue North  
Phone: (612) 561-9080  
Fax: (612) 561-0653

### MISSOURI

North Kansas City 64116  
1141 Swift Avenue  
P.O. Box 12393  
Phone: (816) 221-2070  
Fax: (816) 221-2897

St. Louis 63119  
7574 Watson Road  
Phone: (314) 968-8950  
Fax: (314) 968-2790

### NEW YORK

Flushing 11365-1595 (N.Y.C.)  
175-25 Horace Harding Expwy.  
Phone: (718) 225-2040  
Fax: (718) 423-9619

### NORTH CAROLINA

Charlotte 28209  
4303-B South Boulevard  
Phone: (704) 525-4410  
Fax: (704) 525-0618

### OHIO

Columbus 43214  
4560 Indianola Avenue  
Phone: (614) 263-0929  
Fax: (614) 263-1238

Cleveland 44125  
8001 Sweet Valley Dr.  
Unit #18  
Phone: (216) 447-9030  
Fax: (216) 447-3097

### PENNSYLVANIA

Philadelphia 19154  
12285 McNulty Road  
Phone: (215) 677-7800  
Fax: (215) 677-9908

### TEXAS

Dallas 75220  
10720 N. Stemmons Freeway  
Phone: (214) 353-2996  
Fax: (214) 350-3943

### HOUSTON

Houston 77055  
West 10 Business Center  
1008 Wirt Road, Suite 120  
Phone: (713) 682-0334  
Fax: (713) 682-4867

### WASHINGTON

Renton 98055 (Seattle)  
268 Southwest 43rd Street  
Phone: (206) 251-6680  
Fax: (206) 251-9337

Authorized Service Stations are located in all large cities. For the one nearest you, see the classified section in your phone book (under "Tools-Electric").

## DELTA SERVICE CENTERS

## (CENTRES D'ENTRETIEN DELTA)

### ALBERTA

#10 6320 11th Street S.E.  
Calgary, Alberta  
T2H 2L7  
Phone: (403) 255-3530  
Fax: (403) 258-0767

### BRITISH COLUMBIA

8520 Baxter Place  
Burnaby, B.C.  
V5A 4T8  
Phone: (604) 420-0102  
Fax: (604) 420-3522

### MANITOBA

1699 Dublin Avenue  
Winnipeg, Manitoba  
R3H 0H2  
Phone: (204) 633-9259  
Fax: (204) 632-1976

### ONTARIO

644 Imperial Road  
Guelph, Ontario  
N1H 6M7  
Phone: (519) 836-2840  
Fax: (519) 836-9352

### 40 West Pearce St.

Unit #2  
Richmond Hill, Ontario  
L4B 1E3  
Phone: (416) 771-6111  
Fax: (416) 771-6831

### QUÉBEC

523 Rue Deslauriers  
St. Laurent, (Montréal) P.Q.  
H4N 1W2  
Phone: (514) 336-8772  
Fax: (514) 336-3505

### Suite 202

2022 Rue Lavoisier  
Ste. Foy, Québec,  
Québec  
G1N 4L5  
Phone: (418) 681-7305  
Fax: (418) 681-1695

Authorized Service Stations are located in all large cities. For the one nearest you, see the classified section in your phone book (under "Tools-Electric").

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